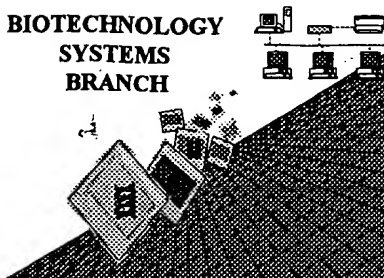


0590
3919

RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/943,689
Source: O/PE
Date Processed by STIC: 9/20/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

OIEP

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/943,689

DATE: 09/20/2001

TIME: 13:29:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09202001\I943689.raw

m 3-4

Does Not Comply
Corrected Diskette Needed

4 <110> APPLICANT: David Michalovich
 5 Matthew Alan Sims
 6 Narjis Shaikh
 8 <120> TITLE OF INVENTION: NOVEL COMPOUNDS
 11 <130> FILE REFERENCE: GP-30088-D1
 13 <140> CURRENT APPLICATION NUMBER: US/09/943,689
 14 <141> CURRENT FILING DATE: 2001-08-31
 16 <150> PRIOR APPLICATION NUMBER: US 09/184,001
 17 <151> PRIOR FILING DATE: 1998-11-02
 19 <150> PRIOR APPLICATION NUMBER: UK 9806221.9
 20 <151> PRIOR FILING DATE: 1998-03-23
 22 <150> PRIOR APPLICATION NUMBER: UK 9817479.0
 23 <151> PRIOR FILING DATE: 1998-08-11
 25 <160> NUMBER OF SEQ ID NOS: 4
 27 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 29 <210> SEQ ID NO: 1
 30 <211> LENGTH: 2186
 31 <212> TYPE: DNA
 32 <213> ORGANISM: HOMO SAPIENS
 34 <400> SEQUENCE: 1

35	cttggcacga	ggcctcgtgc	cagggcgcat	gagggccgc	ggcccgggg	gctgagcg	60
36	cgcgcgctg	cgcgggggc	cgctcgctc	ctccatggag	gccggagag	aaccgctg	120
37	gctggccgaa	ctcaagccc	ggcgcccca	ccagtttgat	tggaagtcca	gctgtgaa	180
38	ctggagcgtc	gccttctccc	cagatggctc	ctggtttgc	tggtctcaag	gacactgc	240
39	cgtcaaaactg	atcccttggc	cgttggagga	gcagttcatc	cctaaaggg	ttgaagccaa	300
40	aagccgaagt	agcaaaaatg	agacgaaagg	gcggggcagc	ccaaaagaga	agacgctgga	360
41	ctgtggtcag	attgtctggg	ggctggcctt	cagcccgctg	ccttccccac	ccagcaggaa	420
42	gctctgggca	cgccaccacc	cccaagtgc	cgatgtctct	tgcttggttc	ttgctacggg	480
43	actcaacgat	gggcagatca	agatctggga	ggtgcagaca	gggctcctgc	ttttgaatct	540
44	ttccggccac	caagatgtcg	tgagagatct	gagcttcaca	cccagtgcca	gtttgatttt	600
45	ggtctccgcg	tcacgggata	agactcttcg	catctgggac	ctgaataaac	acggtaaaca	660
46	gattcaagt	ttatcggg	acctgcagtg	ggtttactgc	tgttccatct	ccccagactg	720
47	cagcatgctg	tgcctgcag	ctggagagaa	gtcggctctt	ctatggagca	tgaggtccta	780
48	cacgttaatt	cggaagctag	agggccatca	aagcagtggt	gtctcttg	acttctcccc	840
49	cgactctgcc	ctgcttgta	cggcttctta	cgataccaat	gtgattatgt	gggacccta	900
50	caccggcgaa	aggctgaggt	cactccacca	caccaggtt	gaccccgcta	tgatgacag	960
51	tgacgtccac	attagctcac	tgagatctgt	gtgcttctct	ccagaaggct	tgtaccttgc	1020
52	cacggtggca	gatgacagac	tcctcaggat	ctgggcccctg	gaactgaaaa	ctccatttgc	1080
53	atttgcctct	atgaccaatg	ggctttgctg	cacatttttt	ccacatgggtg	gagtcattgc	1140
54	cacagggaca	agagatggcc	acgtccagtt	ctggacagct	cctaggggtcc	tgctctcact	1200
55	gaagcaactta	tgccggaaag	cccttcgaag	tttcttaaca	acttaccag	tcctagcact	1260
56	gccaatcccc	aagaaaatga	aagagttcct	cacatacagg	actttttaag	caacaccaca	1320
57	tcttgtgctt	ctttgtagca	gggtaaatcg	tcctgtcaaa	gggagttgct	ggaataatgg	1380
58	gccaacatc	tggtcttgca	ttgaaatagc	atttctttgg	gattgtgaat	agaatgtagc	1440
59	aaaaccagat	tccagtgtac	tagtcatgga	tctttctctc	cctggcatgt	gaaagtgcag	1500
60	cttagaggaa	gagattccac	ttgcacggca	acagagcctt	acgttaaat	ttcagtcag	1560
61	ttatgaacag	caagtgttga	actctttctg	cttgttttga	ttcaaagtgc	agttactgat	1620

RAW SEQUENCE LISTING

DATE: 09/20/2001

PATENT APPLICATION: US/09/943,689

TIME: 13:29:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09202001\I943689.raw

```

62 gttgttttga ttatgcaact aagtaggcct ccagagcctc tctagtggca gaggagctca 1680
63 cactccctcc gctgggaacg atggcttctg cctagtacct atccttgtgt ttctgatgca 1740
64 gtggttagcat tggttcaagt tctctcctgc tgtggtcaga gttgcttcga tgttgccaa 1800
65 gtgcttttct tcttgggctc cctctgacc tgcaggacag ttttcctgga gccatttggg 1860
66 atgaggtatt aatttagctt aactaaatta caggggactc agaggccgtg ctctgaccg 1920
67 atccagacac tattactggc tttttttttt ttttttttaa caatggtgtg catgtgcagg 1980
68 aaatgacaaa tttgtatgtc agattataca aggatgtatt cttaaaccgc atgactattc 2040
69 agatggctac tgagttatca gtggccattt attagcatca tatttatttg tattttctca 2100
70 acagatgtta aggtacaact gtgtttttct cgattatcta aaaaccatag tacttaaatt 2160
71 gaaaaaaaaa aaaaaaaaaa aaaaaa 2186

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73 <210> SEQ ID NO: 2

74 <211> LENGTH: 404

75 <212> TYPE: PRT

76 <213> ORGANISM: HOMO SAPIENS

78 <400> SEQUENCE: 2

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79 Met Glu Ala Gly Glu Glu Pro Leu Leu Leu Ala Glu Leu Lys Pro Gly
80 1 5 10 15
81 Arg Pro His Gln Phe Asp Trp Lys Ser Ser Cys Glu Thr Trp Ser Val
82 20 25 30
83 Ala Phe Ser Pro Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys
84 35 40 45
85 Ile Val Lys Leu Ile Pro Trp Pro Leu Glu Glu Gln Phe Ile Pro Lys
86 50 55 60
87 Gly Phe Glu Ala Lys Ser Arg Ser Ser Lys Asn Glu Thr Lys Gly Arg
88 65 70 75 80
89 Gly Ser Pro Lys Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly
90 85 90 95
91 Leu Ala Phe Ser Pro Trp Pro Ser Pro Pro Ser Arg Lys Leu Trp Ala
92 100 105 110
93 Arg His His Pro Gln Val Pro Asp Val Ser Cys Leu Val Leu Ala Thr
94 115 120 125
95 Gly Leu Asn Asp Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu
96 130 135 140
97 Leu Leu Leu Asn Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser
98 145 150 155 160
99 Phe Thr Pro Ser Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys
100 165 170 175
101 Thr Leu Arg Ile Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val
102 180 185 190
103 Leu Ser Gly His Leu Gln Trp Val Tyr Cys Cys Ser Ile Ser Pro Asp
104 195 200 205
105 Cys Ser Met Leu Cys Ser Ala Ala Gly Glu Lys Ser Val Phe Leu Trp
106 210 215 220
107 Ser Met Arg Ser Tyr Thr Leu Ile Arg Lys Leu Glu Gly His Gln Ser
108 225 230 235 240
109 Ser Val Val Ser Cys Asp Phe Ser Pro Asp Ser Ala Leu Leu Val Thr
110 245 250 255
111 Ala Ser Tyr Asp Thr Asn Val Ile Met Trp Asp Pro Tyr Thr Gly Glu
112 260 265 270

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/943,689

DATE: 09/20/2001

TIME: 13:29:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09202001\I943689.raw

113 Arg Leu Arg Ser Leu His His Thr Gln Val Asp Pro Ala Met Asp Asp
 114 275 280 285
 115 Ser Asp Val His Ile Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu
 116 290 295 300
 117 Gly Leu Tyr Leu Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp
 118 305 310 315 320
 119 Ala Leu Glu Leu Lys Thr Pro Ile Ala Phe Ala Pro Met Thr Asn Gly
 120 325 330 335
 121 Leu Cys Cys Thr Phe Phe Pro His Gly Gly Val Ile Ala Thr Gly Thr
 122 340 345 350
 123 Arg Asp Gly His Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser
 124 355 360 365
 125 Leu Lys His Leu Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr
 126 370 375 380
 127 Gln Val Leu Ala Leu Pro Ile Pro Lys Lys Met Lys Glu Phe Leu Thr
 128 385 390 395 400
 129 Tyr Arg Thr Phe
 132 <210> SEQ ID NO: 3
 133 <211> LENGTH: 2558
 134 <212> TYPE: DNA
 135 <213> ORGANISM: HOMO SAPIENS
 W--> 136 <220> FEATURE: ~~FEATURE~~ *do not insert an alphabetical heading on*
 W--> 136 <220> FEATURE: ~~FEATURE~~ *and same line as numeric*
 137 <221> NAME/KEY: ~~UNSURE~~ *<2217, <222> and <223> are required for nls and xaa's identifier*
 138 <222> LOCATION: ~~(146)(161)(178)(233)(254)(296)~~
 139 <223> OTHER INFORMATION: ~~OTHER INFORMATION~~ Partial DNA sequence derived from EST
 sequences. *delete*
 141 <400> SEQUENCE: 3
 142 gaaaggaacc gctgctgctg gccgaactca agcccgggcg cccccaccag tttgattgga 60
 143 agtcagctg tgaacactgg agcgtgcct tctccccaga tggtccttg tttgcttggt 120
 W--> 144 ctcaaggaca ctgcactgctc aaactnatcc cctggccggt ngaggagcag ttcattcnta 180
 W--> 145 aaggggttga agccaaaagc cgaagtagca aaaatgagac gaaagggcgg ggnagtccaa 240
 W--> 146 aagagaagac gctngactgt ggtcagattg tctgggggct ggccttcagc ctgtgctttt 300
 147 cccacccag caggaagctc tgggcacgcc accacccca agtgcccgat gtctcttgcc 360
 148 tggttcttgc tacgggactc cagcatgggc agatcaagat ctgggaggtg cagacagggc 420
 149 tctgtctttt gaattcttcc ggccaccaag atgtcgtgag agatctgagc ttcacacca 480
 150 gtggcagttt gattttggtc tccgcgtcac gggataagac tcttcgcac tgggacctga 540
 151 ataaacacgg taaacagatt caagtgttat cgggccacct gcagtgggtt tactgctgtt 600
 152 coactctccc agactgcagc atgctgtgct ctgcagctgg agagaagtcg gtctttctat 660
 153 ggagcatgag gtccatacag ttaattcgga agctagaggg ccatcaaagc agtgttgtct 720
 154 cttgtgactt ctcccccgac tctgcccctg ttgtcacggc ttcttacgat accaatgtga 780
 155 ttatgtggga cccctacacc ggcgaaaggc tgaggtcact ccaccacacc caggttgacc 840
 156 ccgccatgga tgacagtga gttccacatta gctcactgag atctgtgtgc ttctctccag 900
 157 aaggcttgta ccttgccacg gtggcagatg acagactcct caggatctgg gccctggaac 960
 158 tgaaaactcc cattgcattt gtcctatga ccaatgggct ttgctgcaca ttttttccac 1020
 159 atggtggagt cattgccaca gggacaagag atggccacgt ccagttctgg acagctccta 1080
 160 gggctcctgtc ctactgaag cacttatgcc ggaaagccct tcgaagtttc ctaacaactt 1140
 161 accaagtcct agcactgcca atcccaaga aaatgaaaga gttcctcaca tacaggactt 1200
 162 tttaagcaac accacatctt gtgcttcttt gtagcagggt aaatcgtcct gtcaaaggga 1260
 163 gttgctggaa taatgggcca aacatctggt cttgcattga aatagcattt ctttgggatt 1320

*The
CRF
program
inserts
alphabetical
headings
for clarity.*

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/943,689

DATE: 09/20/2001

TIME: 13:29:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09202001\I943689.raw

```

164 gtgaatagaa tgtagcaaaa ccagattcca gtgtactagt catggatcctt tctctccctg 1380
165 gcatgtgaaa gtcagtctta gaggaagaga ttccacttgc acggcaacag agccttacgt 1440
166 taaattttca gtccagttat gaacagcaag tgttgaactc tttctgcttg ttttgattca 1500
167 aagtgcagtt actgatgttg ttttgattat gcaactaagt aggcctccag agcctctcta 1560
168 gtggcagagc agctcacact ccctccgctg ggaacgatgg cttctgccta gtacctatcc 1620
169 ttgtgtttct gatgcagtg tagcattggg tcaagttctc tcctgctgtg gtcagagttg 1680
170 cttcagatgtt ggccaagtgc ttttcttctt gggctccctt ctgacctgca ggacagtttt 1740
171 cctggagcca tttggtatga ggtattaatt tagcttaact aaattacagg ggactcagag 1800
172 gccgtgctcc tgaccgatcc agacactatt actggctttt tttttttttt ttttaacaatg 1860
173 gtgtgcatgt gcaggaaatg acaaatttgt atgtcagatt atacaaggat gtattcttaa 1920
174 accgcatgac tattcagatg gctactgagt tatcagtggc catttattag catcatattt 1980
175 atttgtattt tctcaacaga tgtaaggta caactgtgtt tttctcgatt atctaaaaac 2040
176 catagtactt aaattgaaca gttgcaaaga tgtcttaatt gtgtaaagaa ttggtgtagt 2100
177 catgacttta gctgatactc ttatgtacga gatctgtctc tgctgtttaa cttcattgga 2160
178 ttaatcagct ggtttcaact ctactgcgaa acaaaaatag ctcccttaaaa gtactgttct 2220
179 ccttcagtggt catgtagtta tctaatacag acacctcatt caaacaaaac ctgccttagg 2280
180 aaaatttaat atattttaaa ttattttaaa agaaatacaa catcttattc tttagctttc 2340
181 ttaatcggtg ctttatggag gccagtgtaa cgttacatga ctcgttgaga aagttgagga 2400
182 atttctctta ccacctttgt tgcttgaaga aaaacatgtc ttttcaaaat gagaggcttt 2460
183 cattgaagaa aagaaaaaaa caacagttaa aagctattgg ctctctgttt catttttttc 2520
184 cattaagaaa aaaaaaagtc cccttttaaa acaagcag 2558

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186 <210> SEQ ID NO: 4

187 <211> LENGTH: 400

188 <212> TYPE: PRT

189 <213> ORGANISM: HOMO SAPIENS

W--> 190 <220> FEATURE: ~~FEATURE~~W--> 190 <220> FEATURE: ~~FEATURE~~

191 <221> NAME/KEY: UNSURE

192 <222> LOCATION: (53)(59)(98)

193 <223> OTHER INFORMATION: OTHER INFORMATION: Partial DNA sequence derived from EST sequences.

195 <400> SEQUENCE: 4

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196 Lys Glu Pro Leu Leu Ala Glu Leu Lys Pro Gly Arg Pro His Gln
197 1 5 10 15
198 Phe Asp Trp Lys Ser Ser Cys Glu Thr Trp Ser Val Ala Phe Ser Pro
199 20 25 30
200 Asp Gly Ser Trp Phe Ala Trp Ser Gln Gly His Cys Ile Val Lys Leu
201 35 40 45
202 Ile Pro Trp Pro Xaa Glu Glu Gln Phe Ile Xaa Lys Gly Phe Glu Ala
203 50 55 60
204 Lys Ser Arg Ser Ser Lys Asn Glu Thr Lys Gly Arg Gly Ser Pro Lys
205 65 70 75 80
206 Glu Lys Thr Leu Asp Cys Gly Gln Ile Val Trp Gly Leu Ala Phe Ser
207 85 90 95
208 Leu Xaa Leu Ser Pro Pro Ser Arg Lys Leu Trp Ala Arg His His Pro
209 100 105 110
210 Gln Val Pro Asp Val Ser Cys Leu Val Leu Ala Thr Gly Leu His Asp
211 115 120 125
212 Gly Gln Ile Lys Ile Trp Glu Val Gln Thr Gly Leu Leu Leu Asn
213 130 135 140

```

This is a peptide sequence

RAW SEQUENCE LISTING

DATE: 09/20/2001

PATENT APPLICATION: US/09/943,689

TIME: 13:29:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09202001\I943689.raw

```

214 Leu Ser Gly His Gln Asp Val Val Arg Asp Leu Ser Phe Thr Pro Ser
215 145 150 155 160
216 Gly Ser Leu Ile Leu Val Ser Ala Ser Arg Asp Lys Thr Leu Arg Ile
217 165 170 175
218 Trp Asp Leu Asn Lys His Gly Lys Gln Ile Gln Val Leu Ser Gly His
219 180 185 190
220 Leu Gln Trp Val Tyr Cys Cys Ser Ile Ser Pro Asp Cys Ser Met Leu
221 195 200 205
222 Cys Ser Ala Ala Gly Glu Lys Ser Val Phe Leu Trp Ser Met Arg Ser
223 210 215 220
224 Tyr Thr Leu Ile Arg Lys Leu Glu Gly His Gln Ser Ser Val Val Ser
225 225 230 235 240
226 Cys Asp Phe Ser Pro Asp Ser Ala Leu Leu Val Thr Ala Ser Tyr Asp
227 245 250 255
228 Thr Asn Val Ile Met Trp Asp Pro Tyr Thr Gly Glu Arg Leu Arg Ser
229 260 265 270
230 Leu His His Thr Gln Val Asp Pro Ala Met Asp Asp Ser Asp Val His
231 275 280 285
232 Ile Ser Ser Leu Arg Ser Val Cys Phe Ser Pro Glu Gly Leu Tyr Leu
233 290 295 300
234 Ala Thr Val Ala Asp Asp Arg Leu Leu Arg Ile Trp Ala Leu Glu Leu
235 305 310 315 320
236 Lys Thr Pro Ile Ala Phe Ala Pro Met Thr Asn Gly Leu Cys Cys Thr
237 325 330 335
238 Phe Phe Pro His Gly Gly Val Ile Ala Thr Gly Thr Arg Asp Gly His
239 340 345 350
240 Val Gln Phe Trp Thr Ala Pro Arg Val Leu Ser Ser Leu Lys His Leu
241 355 360 365
242 Cys Arg Lys Ala Leu Arg Ser Phe Leu Thr Thr Tyr Gln Val Leu Ala
243 370 375 380
244 Leu Pro Ile Pro Lys Lys Met Lys Glu Phe Leu Thr Tyr Arg Thr Phe
245 385 390 395 400

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/943,689

DATE: 09/20/2001

TIME: 13:29:08

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\09202001\I943689.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:136 M:283 W: Missing Blank Line separator, <220> field identifier
L:136 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:190 M:283 W: Missing Blank Line separator, <220> field identifier
L:190 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4